

Wind-Powered Vehicles



Congratulations! You and your team have been selected as finalists in an elite design challenge sponsored by the STEMite Company. As part of your challenge, you must create a portfolio of your design and engineering process and present it to the other design teams. The product you design will be a prototype for a wind-powered vehicle used to carry students to and from school. Let your imagination run wild as you create an innovative and effective vehicle!

Your Tasks:

Engineer a vehicle that will move as far as possible using only three puffs of air for power.

Document your design and engineering process to share with others.

Unique constraints: All groups will NOT have the same materials available to them in this challenge. You may only use 5 of the materials provided to your group. No exchanges or trades. You have 25 minutes to complete your design and test it.

Remember to utilize the design process. The design process is

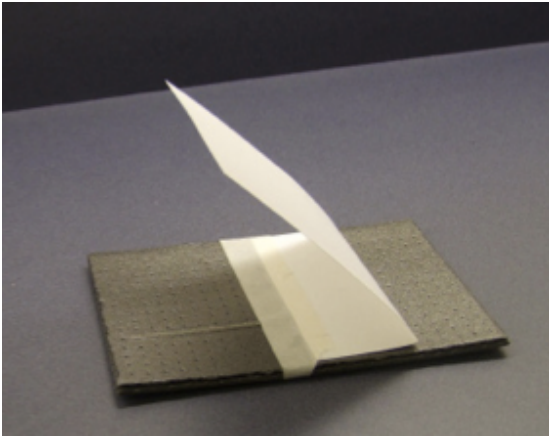
1. **Ask** questions about the problem
2. **Imagine** ways to solve it
3. **Plan** a design
4. **Create** and test it
5. think about ways to **Improve** it

As you work, document the following:

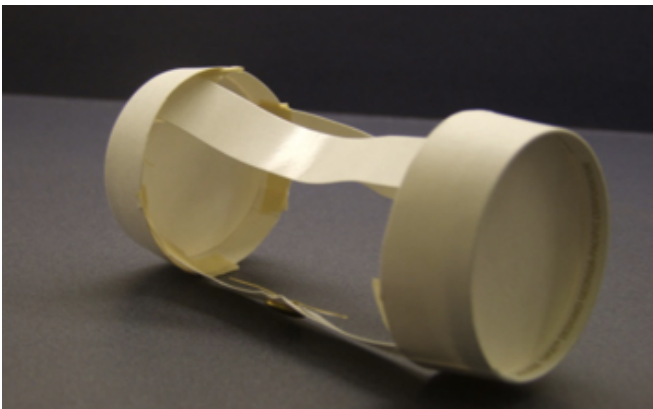
- STATE the problem you are being asked to solve
- Make a list of how you IMAGINE you might use the materials to make a vehicle
- Explain the DESIGN your team selected and why you think it might work well
- Take a picture of the vehicle you create
- Record a test run of your vehicle
- Explain which parts work well
- Explain which parts you would improve and how you would do so
- List the steps of the engineering process your group used



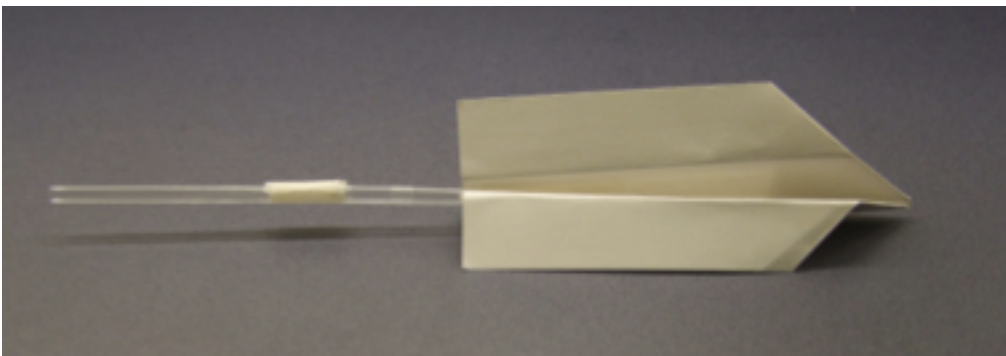
Some examples from other groups



Slide



roll



fly